What is claimed is:

1.   A method for loading a portable executable (PE) image, the method comprising:

5   determining whether a PE image for a platform firmware runtime service includes a discardable section;

loading part of the PE image into runtime memory to be used by the platform firmware; and

in response to determining that the PE image includes a discardable

10   section, omitting at least part of the discardable section when loading the PE image into the runtime memory.

2.   A method according to claim 1, further comprising:

loading the discardable section into boot-time memory to be used by the

15   platform firmware.

3.   A method according to claim 1, further comprising:

using an alignment granularity of less than one kilobyte when loading the PE images into the runtime memory.

20

4.   A method according to claim 1, further comprising:

using an alignment granularity of less than one hundred bytes when loading the PE images into the runtime memory.

25 5.   A method according to claim 1, further comprising:

pre-allocating an area of runtime memory for PE images; and

loading sections from multiple PE images into the pre-allocated area of runtime memory.

30 6.   A method according to claim 1, further comprising:

pre-allocating an area of runtime memory for PE images; and

loading sections from multiple PE images into the pre-allocated area of runtime memory; and

using an alignment granularity of less than one kilobyte when loading the PE images into the pre-allocated area of runtime memory.

5

7.   A method according to claim 1, further comprising:

recording a runtime memory size in association with a first boot process; and

pre-allocating an area of runtime memory for PE images in association with

10   a subsequent boot process, based at least in part on the recorded runtime memory size.

8.   A method according to claim 1, further comprising:

recording a runtime memory size in association with a first boot process;

15   pre-allocating an area of runtime memory for PE images in association with a subsequent boot process, based at least in part on the recorded runtime memory size; and

loading sections from multiple PE images into the pre-allocated area of runtime memory.

20

9.   A method according to claim 1, further comprising:

recording a first runtime memory size in association with a first boot process;

pre-allocating an area of runtime memory for PE images in association with

25   a subsequent boot process, based at least in part on the recorded runtime memory size;

loading sections from multiple PE images into the pre-allocated area of runtime memory;

determining how much of the pre-allocated area of runtime memory was

30   used; and

recording a second runtime memory size in association with the second boot process, based at least in part on the determination of how much of the pre-allocated area of runtime memory was used.

10.   A method according to claim 1, wherein the PE image comprises header information, the method further comprising:

    omitting at least part of the header information when loading the PE image
5 into the runtime memory.

11.   A method for creating a portable executable (PE) image, the method comprising:

    receiving an object file at a linker, the object file containing multiple
10 discardable sections with instructions for performing boot-time operations and a section with instructions for performing runtime operations; and

    generating an executable PE image, based at least in part on the object file;

    wherein the operation of generating the executable PE image comprises
15 grouping the multiple discardable sections together in the PE image.

12.   A method according to claim 11, wherein the operation of grouping the multiple sections with instructions for performing boot-time operations together in the PE image comprises:

20   grouping the multiple discardable sections together below the section with instructions for performing runtime operations.

13.   A method for booting a processing system, the method comprising:

    retrieving a portable executable (PE) image for a runtime service to be
25 provided by platform firmware for the processing system;

    determining whether the PE image includes a discardable section;

    in response to determining that the PE image includes a discardable section, loading the discardable section into boot-time memory to be used by the platform firmware; and

30   loading part of the PE image into runtime memory to be used by the platform firmware; but

    omitting at least part of the discardable section when loading the PE image into the runtime memory.

19

14.   A method according to claim 13, further comprising:

pre-allocating an area of runtime memory for PE images;

loading sections from multiple PE images into the pre-allocated area of

5   runtime memory; and

using an alignment granularity of less than four kilobytes when loading the

PE images into the pre-allocated area of runtime memory.

15.   A method according to claim 13, wherein the PE image comprises header

10   information, the method further comprising:

omitting at least part of the header information when loading part of the PE

image into the runtime memory.

16.   An apparatus containing control logic for providing a runtime service for a

15   processing system, the apparatus comprising:

a machine-accessible medium; and

a portable executable (PE) image in the machine-accessible medium, the

PE image for providing a runtime service for the processing system, wherein the

PE image comprises:

20   a section with instructions for performing runtime operations; and

multiple discardable sections with instructions for performing boot-time

operations, wherein the multiple discardable sections are grouped together in the

PE image.

25   17.   An apparatus according to claim 16, wherein the multiple discardable

sections are grouped together below the section with instructions for performing

runtime operations.

18.   A processing system with control logic for managing PE images, the processing system comprising:

a processor;

a machine-accessible medium responsive to the processor;

5   instructions in the machine-accessible medium which, when executed by the processor, implement an image loader; and

a portable executable (PE) image in the machine-accessible medium, the PE image for providing a runtime service in platform firmware for the processing system;

10   wherein the PE image comprises:

a section with instructions for performing runtime operations; and

multiple discardable sections with instructions for performing boot-time operations; and

wherein the multiple discardable sections are grouped together in the PE

15   image.

19.   A processing system according to claim 18, wherein the image loader comprises control logic:

to determine whether the PE image includes a discardable section;

20   to load part of the PE image into runtime memory to be used by the platform firmware; and

in response to determining that the PE image includes a discardable section, to omit at least part of the discardable section when loading the PE image into the runtime memory.

25

20.   A processing system according to claim 19, wherein the image loader comprises control logic to load the discardable section into boot-time memory to be used by the platform firmware.

21.   A processing system according to claim 19, wherein the image loader
comprises control logic:

      to pre-allocate an area of runtime memory for PE images;

      to load sections from multiple PE images into the pre-allocated area of
5   runtime memory; and

      to use an alignment granularity of less than four kilobytes when loading the
PE images into the pre-allocated area of runtime memory.